

## **CLAIMS**

What I claim is:

- 1        1. A flow regulator comprising:  
2              a pair of side walls extending generally parallel to one another, each of said side wall  
3              having a first end;  
4              a bottom wall connecting said side walls to one another and defining an elongate channel  
5              for receiving a compressible tube, said bottom wall having a first end; and  
6              a roller rotatably and shiftably mounted to said side walls for rolling along the tube in said  
7              channel and compressing the tube against said bottom wall, said bottom wall being provided with  
8              a formation which varies from a first end of said channel towards an opposite, second end  
9              thereof, whereby compressive force applied to said tube via said roller at different longitudinal  
10             positions of said roller along said channel;  
11             wherein the thickness of said side and bottom walls adjacent said first end of said side  
12             and bottom walls, respectively, is slightly greater than the thickness along the remaining side and  
13             bottom walls.

- 1        2. A flow regulator comprising:  
2              a bottom wall having first and second ends;  
3              a pair of side walls extending from said bottom wall generally parallel to one another,  
4              defining a longitudinal channel for receiving a compressible tube, said channel having first and  
5              second ends; and

6           a roller rotatably and shiftably mounted to said side walls for rolling along the tube in said  
7       channel and compressing the tube against said bottom wall, said bottom wall being provided with  
8       a formation which varies from a first end of said channel towards an opposite, second end  
9       thereof, whereby compressive force applied to said tube via said roller at different longitudinal  
10      positions of said roller along said channel;

11           wherein the thickness of each of said side and bottom wall at at least one discrete position  
12      along said side and bottom walls is slightly greater than the thickness along the remaining side  
13      and bottom walls, respectively.

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15           3.       The flow regulator of claim 2 wherein the thickness of each of said side and  
16      bottom wall at said first ends of said side and bottom walls and at said second ends of said side  
17      and bottom walls, are slightly greater than the thickness along the remaining side and bottom  
18      walls, respectively.

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20           4.       The flow regulator of claim 2 wherein the thickness of each of said side and  
21      bottom wall at said first ends of said side and bottom walls, at said second ends of said side and  
22      bottom walls and at a generally central position between said first and second ends of said side  
23      and bottom walls, are slightly greater than the thickness along the remaining side and bottom  
24      walls, respectively.

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26           5.       The flow regulator of claim 2, further comprising at least one protrusion  
27      extending from at least one of said side wall into said channel, defining a gap therebetween, said

3 gap is smaller than the diameter of said compressible tube such that upon compressing said tube  
4 to pass through said gap to rest along said channel, said tube is prevented from accidentally being  
5 dislodged from said channel.

1           6. The flow regulator of claim 2 wherein said pair of side walls extend from said  
2 bottom wall at less than ninety degree angles such that the distance between free ends of said side  
3 walls are smaller than the distance between said side walls at said bottom wall.

7. A flow regulator comprising:

a bottom wall;

a pair of side walls extending from said bottom wall at less than ninety degree angles

such that the distance between free ends of said side walls are smaller than the distance between  
said side walls at said bottom wall, defining a longitudinal channel for receiving a compressible  
tube; said channel having first and second ends; and

7           a roller rotatably and shiftably mounted to said side walls for rolling along the tube in said  
8 channel and compressing the tube against said bottom wall, said bottom wall being provided with  
9 a formation which varies from a first end of said channel towards an opposite, second end  
10 thereof, whereby compressive force applied to said tube via said roller at different longitudinal  
11 positions of said roller along said channel.